

SEQUENCE LISTING

<110> Croteau, Rodney B
Burke, Charles C

<120> GERANYL DIPHOSPHATE SYNTHASE LARGE SUBUNIT, AND METHODS
OF USE

<130> WSUR1117920

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<150> 09/420,211

<151> 1999-10-18

<150> PCT/US98/21772

<151> 1998-10-15

<150> 08/951,924

<151> 1997-10-16

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<170> PatentIn Ver. 2.0

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<213> Mentha piperita

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gtt aaa gat gtt cac ggc ggc cgg agg cgg aga tcc aga tcc act ctc	96
Val Lys Asp Val His Gly Gly Arg Arg Arg Ser Arg Ser Thr Leu	
20 25 30	
ttt caa tcc cat cca ctt cgc act gaa atg cct ttc tct ctc tac ttc	144
Phe Gln Ser His Pro Leu Arg Thr Glu Met Pro Phe Ser Leu Tyr Phe	
35 40 45	
tca tcc ccc ctc aaa gct ccc gcc act ttt tcc gtt tct gca gtt tat	192
Ser Ser Pro Leu Lys Ala Pro Ala Thr Phe Ser Val Ser Ala Val Tyr	
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acc aaa gag ggc agc gaa att agg gat aaa gat ccg gcg cct tcg act	240
Thr Lys Glu Gly Ser Glu Ile Arg Asp Lys Asp Pro Ala Pro Ser Thr	
65 70 75 80	
tcg ccg gcg ttc gat ttc gac gga tac atg ctc cgg aag gcg aaa tcc	288
Ser Pro Ala Phe Asp Phe Asp Gly Tyr Met Leu Arg Lys Ala Lys Ser	
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gtc aac aag gcg ttg gaa gcg gcg gtg cag atg aag gag ccg ctg aag	336

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Arg	Pro	Met	Leu	Cys	Ile	Ala	Ala	Cys	Glu	Leu	Val	Gly	Gly	Asp	Glu	
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Arg	Gly	Lys	Pro	Thr	Asn	His	Met	Ala	Phe	Gly	Glu	Ser	Val	Ala	Val	
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Asp	Val	Cys	Ser	Glu	Gly	Met	Ala	Glu	Val	Gly	Leu	Asp	His	Leu	Glu	
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Phe	Gln	Ser 35	His	Pro	Leu	Arg	Thr 40	Glu	Met	Pro	Phe	Ser 45	Leu	Tyr	Phe
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Arg 130	Pro	Met	Leu	Cys	Ile	Ala 135	Ala	Cys	Glu	Leu	Val 140	Gly	Gly	Asp	Glu
Ser 145	Thr	Ala	Met	Pro 150	Ala	Ala	Cys	Ala	Val 155	Glu	Met	Ile	His	Thr	Met 160
Ser	Leu	Met	His	Asp 165	Asp	Leu	Pro	Cys	Met 170	Asp	Asn	Asp	Asp	Leu 175	Arg
Arg	Gly	Lys	Pro 180	Thr	Asn	His	Met	Ala 185	Phe	Gly	Glu	Ser	Val 190	Ala	Val
Leu	Ala	Gly 195	Asp	Ala	Leu	Leu	Ser 200	Phe	Ala	Phe	Glu	His 205	Val	Ala	Ala
Ala 210	Thr	Lys	Gly	Ala	Pro	Pro 215	Glu	Arg	Ile	Val	Arg 220	Val	Leu	Gly	Glu
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<223> PCR primer GG23F

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Leu Lys Thr Arg Ser Asp Leu Ser Arg Ser Ser Ser Ala Arg Cys Met
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cca act gcc gcc gct gcc gcc ttc ccc act atc gcc acc gcc gcc caa 146
Pro Thr Ala Ala Ala Ala Ala Phe Pro Thr Ile Ala Thr Ala Ala Gln
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Ser Gln Pro Tyr Trp Ala Ala Ile Glu Ala Asp Ile Glu Arg Tyr Leu
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aag aaa tcc atc aca ata agg ccg ccg gag aca gtt ttc ggg ccc atg 242
Lys Lys Ser Ile Thr Ile Arg Pro Pro Glu Thr Val Phe Gly Pro Met
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 His His Leu Thr Phe Ala Ala Pro Ala Thr Ala Ala Ser Thr Leu Cys
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Ala Ala Ala Ala Ile His Leu Val His Ala Ala Ala Tyr Val His Glu
115 120 125

cac ctc cct cta acc gac ggg tcg agg ccc gta tcc aag ccc gca atc 434
His Leu Pro Leu Thr Asp Gly Ser Arg Pro Val Ser Lys Pro Ala Ile
130 135 140

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Gln His Lys Tyr Gly Pro Asn Val Glu Leu Leu Thr Gly Asp Gly Ile
145 150 155

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160 165 170 175

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210 215 220

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Gln	Leu	Ile	Asp	Glu	Asn	Ile	Ile	Gly	Lys	Leu	Lys	Glu	Leu	Ala	Leu	
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Leu	Val	Ala	Glu	Pro	Ser	Leu	Tyr	Ala	Ala							
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Thr	Ala	Ala	Ala	Ala	Ala	Phe	Pro	Thr	Ile	Ala	Thr	Ala	Ala	Gln	Ser	
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Ala	Ala	Cys	Glu	Leu	Val	Gly	Gly	Asp	Arg	Ser	Gln	Ala	Met	Ala	Ala	
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Ala	Ala	Ala	Ile	His	Leu	Val	His	Ala	Ala	Ala	Tyr	Val	His	Glu	His	
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synthase large subunit wherein n at position 9 represents any nucleic
acid base

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aarccmacna aycayatg

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17

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